is this that, with poisonous drugs, such as the toxic alkaloids, about half the usual proportion should be prescribed as ointments. The vaselines and paraffines hinder, rather than favor, the passage of drugs into the skin." Several cases are given in illustration of its favorable effect. In a case of eczema rubrum of the legs, which had been under treatment by the more common methods, a speedy cure was effected by using an ointment consisting of lanolin ℥xij; adipis benz. ʒj; liq. plumbi subacet. ♏xv; acidi carbol. ʒij; ol. lavand. ♏v. In a case of psoriasis lanolin was used as a basis for chrysarobin (twenty grains to the ounce) with favorable result. In chapped hands, friction with the pure lanolin was satisfactory. In the author's experience lanolin was found non-irritating. For general use, its stickiness should be counteracted by the addition of one-eighth to one-fourth its proportion of another fat, such as lard, castor oil, etc.

LIEBREICH (*Brit. Med. Journ.*, July 17, 1886) calls attention to an improved preparation of lanolin—lanolinum purissimum. The earlier product contained the not readily fusible cholesterine ethers and rendered an addition of fat or glycerine necessary in order that the ointment be more easily rubbed in the skin. This pure lanolin has the proper consistence for ointments, and is ready for application without the addition of either of the above substances. This improvement is important, as the addition of glycerine or fat to lanolin is prejudicial to its keeping properties.

MIDWIFERY.

UNDER THE CHARGE OF

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PALPATION OF THE UTERUS PER VAGINAM.

SÄNGER (*Arch. f. Gyn.*, xxviii. p. 54) publishes a series of cases of urinary disorders in which the ureters could be distinctly felt per vaginam. They were about as thick as a goose-quill, and felt in the upper third of the vagina, beginning about 2 cm. (0.75 in.) below the portio vaginalis. The ureters cannot be felt in every woman, but are frequently to be made out during pregnancy. Sänger succeeded in eight out of ten cases of pregnancy, but has never felt them during the lying-in period. The reason why they can be often felt during pregnancy is that they are hypertrophied, and that during the second half they can be pressed against the presenting head.

Observations made on the dead subject coincide with the clinical ones in every respect. Sänger concludes that it is often possible to feel the pars pelvica of the ureters per vaginam, from the points at which they enter the bladder to the base of the broad ligaments, a distance of at most 6–7 cm. (2½ in.)—one-half the length of the pars pelvica, and one-quarter the total length of the ureters.

In pregnant women they can be felt for 10 cm. (4 in.). Sänger thinks it of much clinical importance in any case of urinary disorder to palpate the ureters in order to discover whether they are healthy or not.

CASE OF TWINS OCCUPYING A COMMON AMNIOTIC CAVITY IN WHICH THE CORDS WERE INTERLACED AND COILED ROUND FŒTAL PARTS.

SEDLACZEK records a case of the above rare event (*Arch. f. Gyn.*, xxvi. p. 309). A. B., æt. thirty, VI-para, aborted of twins at the fourth month The two placentæ were adherent to one another, and extracted under chloroform. Only one amniotic cavity present. Both fœtuses were found to be macerated, and at various places showed grooves at the points where the umbilical cords had been coiled round parts of the fœtus. The two cords were much above the average length, considering the size of the fœtuses, and inserted close together into the common placenta.

That of the first-born fœtus passed from the placenta to the left knee, there forming a loop round the thigh just above the patella. The fœtal end of the same cord also ran to the knee, and was squeezed against it by the above-named loop. The two portions of the cord—*i. e.*, the placental and fœtal portions—thus brought together, now twisted spirally round one another three times, and after diverging for a short distance, again became approximated to enclose the cord of the second fœtus, this point lying close to the right shoulder of the second fœtus. From there they passed to the front of the neck of the latter, and after separating to embrace it became continuous with one another.

The cord of the second twin ascended from the navel to its right shoulder-joint, where it was held fast by the other cord. Thence it bent outward and passed through the gap left by the other cord to the placenta.

For references to similar cases, and for an exact figure of this one, the original paper must be consulted.

PREGNANCY IN ONE HORN OF UTERUS BICORNIS; RETENTION OF THE MATURE FŒTUS; REMOVAL OF THE PREGNANT HORN.

WIENER (*Archiv f. Gyn.*, xxvi. p. 234) records a case of the above in which laparotomy was performed on account of a tumor on the right side of the abdomen, which was seriously affecting the patient's health. The nature of the case was very obscure, some features in the woman's previous history pointing to pregnancy, others to the presence of another form of tumor. On opening the abdomen a uterus bicornis was found, the right horn being pregnant. This was opened, and the fœtus, which was in a state of commencing maceration, extracted. The uterine horn in which the latter had lain was then cut off, the pedicle tied, treated with iodoform, and returned into the abdominal cavity. The patient made a good recovery. The fœtus had all the characters of maturity, and measured 52 cm. (20 in.).

Wiener points out that this rare case must be added to some others recently published, which show that it is not impossible for pregnancy to reach its natural duration in a rudimentary uterine horn, as was formerly assumed to be the case.

On Adenoma of the Placenta.

Klotz (*Arch. f. Gyn.*, xxviii. p. 39) describes a new disease affecting the decidua serotina and of the nature of an adenoma. Mrs. L. aborted of a fœtus about 7 cm. (2.75 in.) long, the placenta not coming away. She got up on the fourteenth day, but repeated hemorrhages came on for the next two months, when Klotz saw her. He dilated the cervix, and found on the posterior wall a soft, crumbling tumor, as large as a large oyster-shell. This he removed with a sharp spoon, in pieces of varying size, and it proved to be of placental origin.

A year later Klotz again saw her, owing to repeated profuse menorrhagia, and again found an irregular crumbling growth, which he treated with the curette. This cured her trouble.

Klotz then goes into a minute description of the histology of the removed masses, which were found to consist largely of adenomatous tissue. His conclusions are as follows:

Adenoma of the placenta originates from the dilated glandular spaces of the decidua serotina; it is started by a fusion of the decidual cells into a homogeneous, nucleated, protoplasmic mass (similar to embryonic connective tissue), and by a conversion of the glandular epithelium into a special epithelium-forming layer, into what Klotz terms "epithelial zuchtzellen." The protoplasmic substance above referred to, grows out in the form of projections, the connective tissue elements taking the largest share in the growth. By further growth and proliferation these various projections become multiplied and interlaced, and form nodules of adenomatous tissue.

After removal of the placental portions that have been converted into adenomatous tissue, the adenomatous growth may recur. The adenomatous degeneration seems to lead to death or expulsion of the fœtus, and to prolonged retention of the placenta.

Klotz has seen this adenomatous growth in three cases, in all of which the symptoms were very similar; recurrence was seen only once.

On Habitual Death of the Fœtus in Utero due to Renal Disease in the Mother.

Fehling (*Arch. f. Gyn.*, xxviii. p. 300) publishes some observations in which renal disease in pregnant women appeared to be connected with habitual death of the fœtus. Five cases are recorded in which albuminuria was detected during pregnancy, sometimes due to chronic parenchymatous nephritis, sometimes to true granular kidneys. In one or two instances constitutional sequelæ caused by the contracted kidneys showed themselves.

Fehling cannot as yet say whether the albuminuria preceded pregnancy or was secondary to it, but the former view is the more probable. In several patients slight albuminuria persisted after delivery, increasing every time pregnancy recurred. The rapid diminution of albuminuria after the death of the fœtus was very marked. No evidence of syphilis could be detected in either parents or fœtus.

The renal disease in these cases led to the death of the fœtus, owing to the placenta having become infiltrated with white infarcts, and to its healthy tissue, therefore, no longer sufficing to nourish the fœtus. The latter was usually expelled six to eight or even more weeks after death. The placenta was invariably smaller than normal, or even atrophied, the weight being below the average. The infarcts consisted of fibrin nodules, such as are often found in small numbers even in healthy placentæ. In addition to the usual wedge-shaped nodules, Fehling found others irregular in form, tough, and solid on section or filled with vacuoles.

The prognosis for the child is very bad; in only one of Fehling's cases was the life of the child saved, and then only by the induction of premature labor. The prognosis is more favorable to the mother, but where the renal disease is severe she runs great risk from eclampsia and uræmia.

HYDRASTIS CANADENSIS DOES NOT INDUCE UTERINE CONTRACTIONS.

SCHATZ (*Berl. klin. Woch.*, May 10, 1886) again discusses the action of hydrastis canadensis, and defends his original view that while the drug has a vasomotor action on the uterus it does not directly act on the muscular fibres and cause them to contract. Fellner, from recent experiments, believed that such a direct action did occur at any rate in dogs and and rabbits, but Schatz thinks the contractions that Fellner noticed were more probably secondary to the anæmia produced by the drug and not caused by its direct action on the muscular tissue. In this respect it differs from ergot, and may be advantageously used where the latter would be injurious owing to the contractions it might produce.

ON THE ETIOLOGY OF FACE PRESENTATIONS.

SCHATZ (*Arch. f. Gyn.*, xxvii. p. 293) publishes two cases of face presentation produced by an ill-developed shape of the uterus. Some uteri, instead of having two long sides and one short one (at the fundus), are equilateral, or the base may be even longer than the sides, so that the uterus is wider than long. In face presentations the fœtus is flexed on its dorsal aspect, and Schatz thinks that the equilateral form may produce this dorsal flexure. The fœtus will lie most conveniently in such a uterus if the head and breech occupy two corners and if the body is flexed in the direction of the third angle. If the dorsum looks toward the latter, the vertex or breech will probably present; if the abdomen, the fœtus will be extended, and a face presentation may be the result.

Supposing, now, the breech to lie in one of the upper corners and the head at the os, the form-restitution force of the uterus would tend to displace the head of the child toward the side of the pelvic inlet opposed to that on which the breech is placed. If the head is movable above the brim, a transverse presentation will result with the dorsum downward. But if the head has engaged in the brim it can no longer be displaced, and the form-restitution force of the uterus will cause it to be extended and possibly cause the face to present. The author shows no reason for his opinion as to cause and effect. The phenomena seem capable of the converse interpretation.

INJURIES OF THE VAGINA AND PERINEUM ACCOMPANYING LABOR.

FREUND (*Gyn. Klinik.*, vol. i. p. 135), after briefly mentioning the injuries to the cervix associated with labor, describes those of the vagina, and points out that their frequent occurrence at particular parts of the vaginal canal depends on the anatomical structure of the walls at those parts, and on the extent to which they are stretched during labor. The regions most likely to tear are, according to him, in the laquear vaginæ, the lateral portions (where the injuries are usually prolonged from tears in the cervix); in the middle portion of the vagina, the posterior wall, especially the portions on either side of the columna rugarum posterior; and, lastly, at the floor of the pelvis, also the posterior portion. The portion bounding the columna rugarum posterior is especially liable to give way on the side on which the face descends. At the anterior vaginal wall the parts on either side of the columna rugarum anterior are occasionally endangered, especially in presentations with vertex anterior, and at the anterior wall of the vulva the pressure of the descending head often leads to bruising of the structures lying near the symphysis and the pubic arch.

The above injuries may occur where the vagina is of normal structure, but are most frequent where predisposing influences are present. Freund mentions four such: 1. Cicatrices in the laquear left by previous parametric and paravaginal inflammatory processes, by operations for fistula, by excision of large vaginal cysts, etc.; 2, rigidity of the vagina in elderly primiparæ, which especially affects the lower third, and rarely (in persons above forty) the vaginal fundus; 3, congenital narrowness of the vagina, with a generally contracted pelvis or a general infantile formation of body; 4, limited extensibility at certain places, especially where bony masses project into the pelvic canal—*e.g.*, unusually prominent ischial spines.

The severest injuries of the parturient canal are associated with the application of forceps, owing to the circumference of the head being increased by the forceps, to the acceleration of the exit of the head, to the edges of the blades where they are unsymmetrically applied to the head, to the increased relative displacement of the vaginal walls, and to the normal mechanism of delivery being interfered with. The injuries usually affect the same parts as those associated with spontaneous labor, but are more severe.

Freund then discusses the influence which Tarnier's axis-traction forceps has on the production of vaginal injuries. As regards the first four points mentioned above, he finds no great difference between Tarnier's and other forceps, but regards it as especially useful where the head lies in the pelvic brim or is still movable above it.

PROLAPSE OF THE UMBILICAL CORD THROUGH THE RECTUM.

STROYNOWSKI (*Centralbl. f. Gyn.*, May 29, 1886) publishes an instance of the above rare occurrence during labor. Shortly after rupture of the membranes, a loop of the umbilical cord, 24 cm. (9½ inches) long, was observed to be prolapsed through the rectum. The child, well-developed, but partly asphyxiated, was expelled about half an hour afterward, drawing the prolapsed umbilical cord with it. It was successfully resuscitated.

On vaginal examination post-partum, an aperture could be felt immediately above the perineum, and leading into the rectum, through which the prolapse had occurred.

Stroynowski thinks that either the recto-vaginal septum was unusually weak and gave way before the pressure of the head, or that the midwife perforated the septum in attempting to force down the head by pressing per rectum. The tear healed entirely.

ON THE CONTINUOUS CATGUT SUTURE IN CASES OF RUPTURED PERIN

Various writers have recently recommended continuous catgut sutur the place of ordinary interrupted silk sutures for bringing the edges of wo together. KELLER communicates to the *Archiv f. Gyn.*, xxvi. p. 283 results he has obtained in applying this form of suture to cases of rupt perineum, results, much better, he says, than those formerly seen when i rupted silk sutures were used.

The plan Keller adopts is the following: After removal of the after-l the vagina is irrigated and the sides of the tear are thoroughly cleansed a solution of corrosive sublimate 0.5 per 1000. He then proceeds to se the wound, beginning at the edge of the vagina with an ordinary kn suture and then carrying a continuous suture in spirals back toward the On reaching the posterior end of the tear the end of the continuous s may be fastened by knotting it in with an ordinary interrupted suture may be tied on to the last spiral turn. In a few cases in which the edge not come into very accurate contact Keller used one or two superficial rupted catgut sutures in addition to the deeper continuous ones. The w when sewn up was covered with iodoform collodium and the patients t be quiet; their legs were never tied together. Keller was greatly pl with this form of suture. The line of union was smooth and regular, more so than with the ordinary *modus operandi.* He ascribes this par the edges having been brought into more accurate contact, partly t greater elasticity of catgut. In forty-one out of forty-two cases, the r were highly successful. One special advantage of the catgut is that it u goes absorption and therefore does not need removal.

ON THE APPLICATION OF THE FORCEPS TO THE AFTER-COMING HE

FREUDENBERG contributes an article to the *Centralbl. f. Gyn.*, March 27, in which he combats Lomer's view that it is a difficult operation to app forceps to an after-coming head, partly because the fœtal parts block t vagina, partly owing to the firm impaction of the head caused by pr attempts at extraction. Freudenberg maintains that if the body of the is properly held it cannot cause any difficulty to the forceps being pass along the sacral concavity, and when the blades reach the brim there is plenty of room near the sacro-iliac synchondroses for them to glide u if the head is impacted in the antero-posterior diameter.

The application of the forceps is usually even easier when the hea descended into the pelvic cavity, though Freudenberg does not deny t exceptional circumstances it may be difficult.

These cases of an after-coming head have some advantages pecu themselves: the delivery of the trunk which has already taken pla thoroughly dilated the soft parts; the neck forms a good guide to the and the fixed condition of the latter is a help in applying the forceps. enberg agrees with Lomer that this operation is sometimes the me saving a child's life, but thinks he has overrated the difficulty attendi execution.

RECENT IMPROVEMENTS IN THE PERFORMANCE OF CÆSAREAN SECTION.

SÄNGER contributes a lengthy article to the *Archiv f. Gyn.*, vol. xxvi. p. 163, on the above subject, in which he contrasts the advantages of the Cæsarean and Porro's operation and discusses the improvements that have lately been introduced into the performance of the former. He also publishes a successful case of Cæsarean section.

The all but unanimous approval with which Porro's operation was received and which it has till lately enjoyed, is due to the high mortality which formerly accompanied Cæsarean section. That excessive mortality is, however, avoidable by means of modern improvements in the *modus operandi*, so that, although Porro's method continues best for some cases, it can no longer be allowed to retain its preëminent position.

The following are some details of the Cæsarean section which Sänger performed according to his improved method:

A. S., æt. twenty-one; generally contracted, flat, rickety pelvis; conjugata vera, 6 to 6.5 cm. (ca. 2½ in.) The operation was undertaken as soon as the pains had become strong and the os fully dilated. The abdominal incision measured 16 cm. (6¼ in.), the uterine nearly as much. In making the latter, the placenta was encountered in its whole length and partly cut, and partly torn through, after which the child was extracted. Hemorrhage moderate in quantity. The child was extracted in a state of partial asphyxia, but soon revived.

The uterus was now drawn out of the abdomen and supported on a napkin; the placenta was removed and the lower part of the uterus constricted with an India-rubber tube. No fresh hemorrhage followed the removal of the placenta, and altogether the discharge of blood from the edges of the uterine incision and from the cavity was very moderate. It was most abundant from the lower portion of the incised surface which was found to have involved the lower segment of the uterus.

The next step was the resection and sewing up of the uterus. Sänger first of all detached the serous membrane for a distance of 3 to 4 mm. (0.15 to 0.2 in.) along the whole incision, and then removed a slice of muscle from each incised surface 1 to 2 mm. (0.4 to 0.8 in.) in thickness. Twenty-eight sutures were used to bring the edges of the wounds together, eight being silver, and twenty silk. The silver were passed through the entire depth of the uterine wall on each side and then twisted.

The superficial peritoneal silk sutures were so inserted as to bring the opposed surfaces of the liberated strips of serous membrane into accurate contact. When they had all been inserted, the tube constricting the uterus was removed, but scarcely a drop of blood made its appearance. The uterus was washed with corrosive sublimate, 1:1000, and returned into the abdomen, the wound in the latter being closed in the usual way.

The patient did well after the operation; the highest temperature being 37.9° C. (100° F.); highest pulse-rate, 120. The patient was able to leave her bed on the fifteenth day.

Sänger next proceeds to discuss the various steps in the operation.

He recommends corrosive sublimate for disinfecting the abdominal skin and generative organs before the operation. In making the uterine incision the lower segment should be avoided owing to the circular sinus and large veins lying there. He believes that the numerous deaths from hemorrhage that formerly accompanied Cæsarean section were due to those vessels being divided. The limits to which it is safe to go may be ascertained by the looseness of the peritoneum over the lower segment, and the length of the incision should be regulated accordingly.

As regards the incision involving the placenta, Sänger's case showed that even when the latter lay in the direct line of incision, no great hemorrhage or difficulty need be experienced, nor was the insertion of the sutures rendered more difficult. He thinks it much more serious to wound the coronary vein of the lower segment than to incise the placenta.

Sänger goes fully into the best way of sewing up the incised uterus, and strongly commends the plan of using what are termed "musculo-muscular and sero-serous sutures;" the former being deep, the latter superficial. Three other points are important: rigid antisepsis, leaving the decidua uninjured by the stitches, and the use of such materials for the sutures as are not easily absorbed—*e. g.*, silver and silk.

In inserting the sutures it is most important that two peritoneal *surfaces* be brought into intimate contact; this is far safer than merely bringing the two *edges* together, though success has been attained on the latter plan. In order to approximate the surfaces, it is best to liberate a margin of serosa and to cut away a thin slice of muscle on each side. Sänger thinks a thickness of 2 mm. (0.1 in.) quite enough, and has seen no harm from it. The serosa should be liberated for a distance of 4 mm. (0.2 in.). The sutures should be inserted as close together as possible, one helping to support the other. Moreover, it is best that the sutures should not penetrate the uterine cavity, but run beneath the decidua, otherwise there is risk of the lochia penetrating into the uterine tissues at the points traversed by the sutures and leading to septicæmia. Neither silver nor silk sutures do harm. Silk is entirely absorbed in process of time; silver may either become embedded in the uterine wall and remain innocuous indefinitely, or be discharged into the uterine cavity. A solution of corrosive sublimate is the best for washing the uterus.

These improvements in the performance of Cæsarean section have greatly modified its position *versus* Porro. So long as Cæsarean section "was almost certain death," Porro's operation, with a mortality of fifty-six per cent., was preferable. Now, however, that modernized Cæsarean sections can show a mortality of only forty per cent., while they have the advantage of not depriving a woman of her uterus and ovaries, they should be regarded as far superior operations.

THE ETIOLOGY OF PUERPERAL MASTITIS.

BUMM (*Arch. f. Gyn.*, xxvii. p. 460) discusses the share played by micro-organisms. He has met with two kinds of cocci in mammary abscesses, which differ partly by microscopical characters, partly by their mode of growth in cultivating media. The "staphylococcus pyogenes aureus" forms colonies, which are at first white, afterward golden-yellow. The microscopical characters depend on the treatment—*e. g.*, on staining—adopted; sometimes the shape is circular, sometimes that of a diplococcus. The streptococcus, on the other hand, has some similarity to a chain. Where staphylococci are present, the abscess begins with deep-seated inflammation, which gradually spreads to the surface; while abscesses due to the streptococcus usually begin with superficial inflammation, followed by an infiltration of the deeper parts and suppuration.

Staphylococci grow readily on almost any nutritive soil, but the streptococcus is not so easy to cultivate. It grows best in agar-agar, forming smaller and more delicate colonies than does the staphylococcus.

Hitherto fifteen cases of suppurative mammary abscess have been published in which cocci were discovered. In eleven the "staphylococcus pyogenes aureus" (or albus) was present; in four the "streptococcus pyogenes."

Bumm believes that these cocci directly provoke the phlegmonous inflammation by their growth and proliferation. The abscesses usually arise by abrasions of the cuticle, though the infection occasionally travels up the milk-ducts.

Bumm also searched for bacteria in milk just taken from women. Great differences were found; sometimes one part of the milk examined contained bacteria, another part none. The distance, also, to which bacteria penetrate into the lactiferous ducts varies greatly, but Bumm feels no doubt that pyogenic staphylococci do pass into the interior of a gland by means of the milk-ducts.

He concludes from his observations that the usual belief as to the danger of allowing milk to stagnate in the mammary glands is well founded.

On the Elimination of Various Substances through the Milk.

FEHLING (*Archiv f. Gyn.*, xxvii. p. 332) publishes some observations made to determine what drugs or articles of diet administered to a suckling woman affect her milk.

Salicylate of sodium and iodide of potassium may be detected in large quantities in the milk of woman and pass out both in her own and in the infant's urine.

Ferrocyanide of potassium passes out in the mother's urine but not in the child's. Its amount in the milk is very small.

Fehling also made some observations as to the effect of the application of iodoform to perineal lacerations in the mother. He was able to detect the presence of iodine in her milk and urine, and sometimes but not always in the child's urine. No harm was ever found to result to the child from the application of iodoform to its own body (*e. g.*, to the navel) or to its mother while suckling it.

When mercury was given to the mother, the effect on her infant varied greatly; but generally none could be detected in the latter.

Fehling also investigated the influence on the child of acids given to the mother. He tried citric, hydrochloric, and acetic acids, but none of them affected the reaction of the mother's milk or appeared in any way to disturb the child.

Fehling made similar experiments with narcotics. He gave tr. opii ♏ xxv, to a series of nursing women; in no case did the child become more sleepy or constipated or appear less ready to take the breast. Morphia given subcutaneously in the ordinary quantities was also tried. As a rule, the child was quite unaffected; in one or two instances it seemed to sleep rather long, but not to a very unusual extent. These experiments show that a mother who has had a subcutaneous injection of morphia may nurse her child without any risk of the drug doing it harm.

Chloral was given to the mother in doses of 1.5 to 3 grammes (gr. 23 to 46); in no case did it produce any alarming symptoms in the child, though occasionally the latter appeared somewhat more restless or sleepy than usual.

As regards atropine, Fehling found that when given to the mother it passed into the infant and dilated its pupils. No harm, however, resulted to the child even when the mother took large doses.

HOW CAN MOST AIR BE MADE TO PASS IN AND OUT OF THE CHEST OF CHILDREN BORN IN A STATE OF ASPHYXIA?

Various writers have recently discussed and sought to establish by experiment the relative value of Schultze's, of Silvester's, and other methods for resuscitating children born in a state of asphyxia.

LAHS (*Archiv f. Gyn.*, xxvi. 273) recommends a somewhat different experimental procedure. He thinks that the use of a manometer for deciding between the rival methods is misleading, for it merely indicates the pressure at which air passes in and out of the chest, while the determination of the quantity of air is of far greater importance. This Lahs attempts to estimate by a modification of Hutchinson's spirometer.

Lahs, moreover, criticises and objects to the methods adopted by Behm and Torggler. These experimenters brought their manometer into direct connection with the trachea, thus avoiding the obstacle opposed by the glottis. A better plan, according to him, is to connect the spirometer with the pharynx through the nostrils, so that the natural obstruction offered by the larynx is not interfered with; moreover, the stomach under these circumstances can admit some air, as it is known to do during efforts at resuscitation.

Lahs considers the question still unsettled as to which is the best way of expanding the lungs of an asphyxiated newborn babe; but future observations should be made on the above lines, and the result will probably be in favor of Schultze's or Silvester's to the exclusion of others.

ON THE VALUE OF SCHULTZE'S SWINGING MOVEMENTS FOR RESUSCITATING APPARENTLY STILLBORN CHILDREN.

SKUTSCH (*Centralbl. f. Gyn.*, May 22, 1886) tested the value of Schultze's swinging movements under the following circumstances. Vertex presentation; membranes intact. Fœtal movements and heart sounds heard two hours before rupture of the membranes; after the latter event the child was rapidly expelled, stillborn, but with all the signs of maturity. Percussion of lungs showed impaired resonance everywhere. Skutsch at once began to swing the child fifty times, according to Schultze's directions. After the fifteenth swing, inspiratory and expiratory sounds became audible. Chest again percussed: gave a resonant note over every portion of the pulmonary area and a post-mortem showed that the lungs contained a considerable amount of air. Skutsch concludes that Schultze's swinging movements are a satisfactory means of filling collapsed lungs with air.

The dispute on this subject seems somewhat purposeless. The experiments of Champneys in the *Medico-Chirurgical Transactions* (also AMERICAN JOURNAL OF THE MEDICAL SCIENCES for April, 1886) have proved that Schultze's method is one of the most efficacious for ventilating the lungs, the sole difficulty being (as in all other manipulative methods) to insure the patency of the upper air-passages. This can easily be secured by tying in a catheter in the manner there described.

SOME REMARKS ON INFANT FEEDING.

DR. HENRY ASHBY states (*Medical Chronicle*, May, 1886) that it has been shown by recent researches that cows' milk is about four times as rich in casein as human milk, while the amount of salts is some three or four times as much, and the amount of sugar in human milk is half as much again as in cows' milk. The addition to cows' milk of water and sugar, with the object of approximating the various constituents to those of human milk, must necessarily fail as regards one or more of them. Moreover, the addition to cows' milk of lime water, barley water, or a fluid containing dextrin or some other gelatinous substance, does not, as is generally supposed, prevent the bulky coagulation *provided the fluid be left at rest.* On this account Dr. Ashby advocates peptonized milk. This may be readily prepared for infants by pouring four ounces of boiling water on four ounces of milk, adding one-fourth of one of Benger's peptonizing powders, two teaspoonfuls of cream, and allowing it to stand for ten or twenty minutes, according to the amount of peptonizing desired, then adding a teaspoonful of sugar or milk sugar, and letting the infant take it at once. When this form of food is administered, though some curd may appear in the stools it is always soft and passed without difficulty.

Another less expensive artificial human milk may be prepared by mixing one-quarter pint of cream with three-quarters pint of warm water and adding one-half ounce of milk sugar. To this two to ten ounces or more of milk may be added, according to the age or the infant's capacity for the digestion of curd.

Another artificial human milk may be prepared according to Meigs's formula by taking two tablespoonfuls of cream of medium quality, one of milk, two of lime-water, and three of water to which sugar of milk has been added in the proportion of seventeen and three-quarters drachms to the pint, which saccharine solution must be kept in a cool place and prepared fresh every day or two. An infant may take a half pint to three pints of this mixture, according to age. In round numbers, this artificial human milk may be said to contain eleven to twelve per cent. of solids, of which three or four per cent. is fat, one per cent. curd, and six to seven per cent. sugar.

Any one of the above forms of food will generally be found to agree well with a healthy infant, or when it is suffering from dyspepsia or intestinal catarrh.